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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: 38005-0164

Applicant: Volkmar WEHNER et al.

Patent No.: 6,794,517 B2

Serial No.: 10/092,889

Issue Date: September 21, 2004

Filing Date: March 8, 2002

Examiner: S. Wright

Title: BIS(TRIFLUOROMETHYL)HYDANTOINS AS INTERMEDIATES
FRO PHARMACEUTICALLY ACTIVE INGREDIENTS

**REQUEST FOR CERTIFICATE OF CORRECTION
PURSUANT TO 37 C.F.R. § 1.322**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**Certificate
NOV 12 2004
of Correction**

Dear Sir:

Applicants hereby request a Certificate of Correction, pursuant to 37 C.F.R. §1.322, to correct errors that are present in the patent incurred through the fault of the Patent and Trademark Office ("PTO"). Attached is Form PTO/SB/44, which reflects the changes listed below:

Column 18, line 27, delete "X s" and insert --X is--

Column 18, line 32, delete "COOH a metal s it of COOH," and insert -COOH, a metal salt of COOH,--

Column 18, line 37, after "wherein" delete "the"

Column 18, line 52, delete "X," and insert --X',--.

The following item is evidence that the errors were incurred through the part of the Applicant and the PTO:

- A copy of the Examiner's Amendment that accompanied the Notice of Allowance mailed May 13, 2004.

11/10/2004 NNGUYEN2 00000106 6794517

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100.00 OP

24 NOV 2004

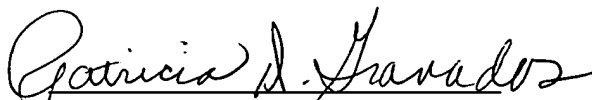
The required filing fee under §1.20(a) is enclosed. Applicants believe the appropriate filing fee is enclosed, however, the Commissioner is hereby authorized to charge any deficiency or to credit any overpayment to Deposit Account No. 08-1641.

Please send the Certificate of Correction to:

Heller Ehrman White & McAuliffe, LLP
1666 K Street, N.W., Suite 300
Washington, DC 20006

Applicant requests a print copy of the correction cover page to Patent No. 6,794,517.

Respectfully submitted,

Date: November 9, 2004 
Patricia D. Granados
Reg. No. 33,614
Attorney for Applicant
Customer No. 26633

Heller Ehrman White & McAuliffe LLP
1666 K Street, N.W., Suite 300
Washington, DC 20006
Telephone: (202) 912-2000
Facsimile: (202) 912-2020

24 NOV 2004

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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO : 6,794,517 *B2*

DATED : September 21, 2004

INVENTOR(S) : Volkmar WEHNER et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 18, line 27, delete "X s" and insert --X is--

Column 18, line 32, delete "COOH a metal s it of COOH," and insert --COOH, a metal salt of COOH,--

Column 18, line 37, after "wherein" delete "the"

Column 18, line 52, delete "X," and insert --X',--

MAILING ADDRESS OF SENDER: Heller Ehrman White & McAuliffe

1666 K Street, N.W., Suite 300

Washington, D.C. 20006

PATENT NO. 6,794,517 *B2*No  anal copies

24 NOV 2004

Art Unit: 1626

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Paul M. Booth on May 10, 2004.

The application has been amended as follows:

Please amend the claims as shown on the following pages:

Claims 1-6 (Canceled).

7. (currently amended) The hydantoin of claim 16, wherein R¹ is (C₁-C₆)-alkyl, (C₃-C₇)-cycloalkyl or (C₃-C₇)-cycloalkyl-(C₁-C₄)-alkyl.

8. (previously presented) The hydantoin of claim 7, wherein R¹ is isobutyl or cyclopropylmethyl.

9. (original) The hydantoin of claim 7, wherein the carbon atom carrying the R¹ residue has an S configuration.

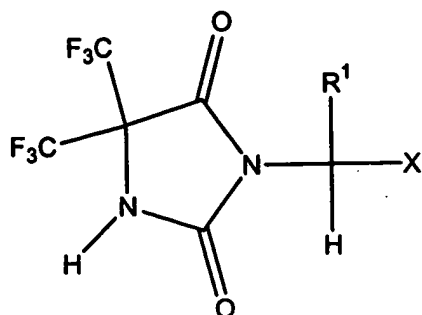
10. (currently amended) The hydantoin of claim 16, wherein ~~the carboxylic acid derivative~~ X is a (C₁-C₆)-alkyl carboxylate ester.

Claims 11-12 (Canceled).

13. (currently amended) The process of claim 22, wherein the reaction is carried out in an inert solvent and at a temperature from about 20°C to about 80°C.

Claims 14-15 (Canceled).

16. (New) A hydantoin having the formula:

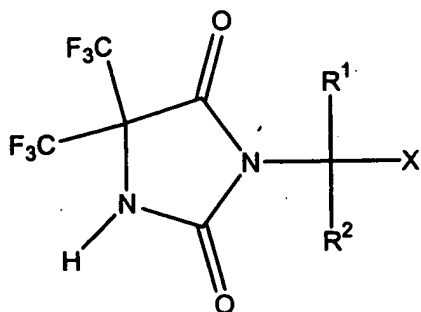


in any stereoisomeric or tautomeric form,

wherein R^1 is hydrogen or an unsubstituted or substituted residue selected from the group consisting of (C₁-C₆)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₃-C₇)-cycloalkyl, (C₃-C₇)-cycloalkyl-(C₁-C₄)-alkyl, (C₆-C₁₂)-aryl, (C₆-C₁₂)-aryl-(C₁-C₄)-alkyl, heteroaryl and heteroaryl-(C₁-C₄)-alkyl,

wherein X is COOH, a metal salt of COOH, an ammonium salt of COOH, a C₁-C₆ alkyl carboxylate ester, a benzyl carboxylate ester, -CONH₂, -CN, -CHO, or -CH₂OH or a salt or derivative thereof, wherein said derivative is an ester, an amide, a nitrile, an aldehyde or a hydroxymethyl group.

17. (New) A hydantoin having the formula:



wherein R^1 and R^2 independently are selected from the group consisting of hydrogen or an unsubstituted or substituted residue selected from the group consisting of (C₁-C₆)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₃-C₇)-cycloalkyl, (C₃-C₇)-cycloalkyl-(C₁-C₄)-alkyl, (C₆-C₁₂)-aryl, (C₆-C₁₂)-aryl-(C₁-C₄)-alkyl, heteroaryl and heteroaryl-(C₁-C₄)-alkyl,

wherein X is COOH, a metal salt of COOH, an ammonium salt of COOH, a C₁-C₆ alkyl carboxylate ester, a benzyl carboxylate ester, -CONH₂, -CN, -CHO, or -CH₂OH or a salt or derivative thereof, wherein said derivative is an ester, an amide, a nitrile, an aldehyde or a hydroxymethyl group.

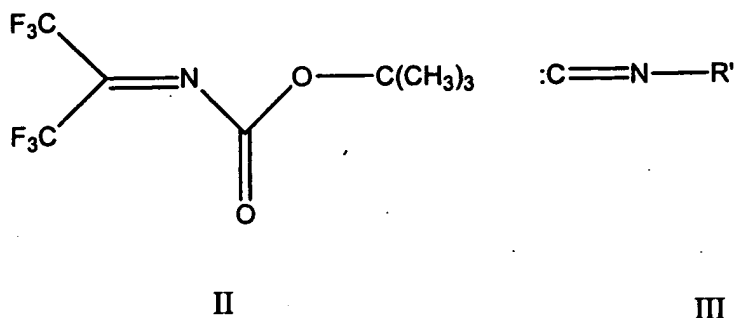
18. (New) The hydantoin according to claim 16, wherein X is COOH, ~~or a salt thereof~~ a metal salt of COOH, or an ammonium salt of COOH.

19. (New) The hydantoin according to claim 17, wherein X is COOH ~~or a salt thereof~~ a metal salt of COOH, or an ammonium salt of COOH.

20. (New) The hydantoin according to claim 16, wherein X is ~~an ester or an amide~~ a C₁-C₆ alkyl carboxylate ester, a benzyl carboxylate ester, or -CONH₂.

21. (New) The hydantoin according to claim 17, wherein X is ~~an ester or an amide~~ a C₁-C₆ alkyl carboxylate ester, a benzyl carboxylate ester, or -CONH₂.

22. (New) A process for preparing a hydantoin according to claim 17, which comprises reacting the compound of formula II with a compound of formula III



wherein R' is -C(R¹)(R²)-X',

wherein R¹ and R² independently are selected from the group consisting of hydrogen or an unsubstituted or substituted residue selected from the group consisting of (C₁-C₆)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₃-C₇)-cycloalkyl, (C₃-C₇)-cycloalkyl-(C₁-C₄)-alkyl, (C₆-C₁₂)-aryl, (C₆-C₁₂)-aryl-(C₁-C₄)-alkyl, heteroaryl and heteroaryl-(C₁-C₄)-alkyl, and

wherein X' is selected from the group consisting of ~~a carboxylic acid ester, an amide, a nitrile, an aldehyde and a hydroxymethyl group,~~ a C₁-C₆ alkyl carboxylate ester, a benzyl carboxylate ester, -CONH₂, -CN, -CHO, or -CH₂OH.

23. (new) The hydantoin of claim 17, wherein ~~the carboxylic acid derivative~~ X is a (C₁-C₆)-alkyl carboxylate ester.

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FEE TRANSMITTAL
for FY 2005
Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$100.00)

Complete if Known

Application Number: 10/092,889 now 6,794,517
Filing Date: March 8, 2002
First Named Inventor: Volkmär WEINER et al.
Examiner Name: S. Wright
Art Unit: 1626
Attorney Docket No.: 38005-0164

METHOD OF PAYMENT (check one)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account

Deposit Account Number: 08-1641 (Docket No. 38005-0164)

Deposit Account Name: Heller Ehrman White & McAuliffe LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description | Fee Paid |
|---------------------|-----------------|----------------|-----------------|------------------------|-------------|
| 1001 | 790 | 2001 | 395 | Utility filing fee | |
| 1002 | 350 | 2002 | 175 | Design filing fee | |
| 1003 | 550 | 2003 | 275 | Plant filing fee | |
| 1004 | 790 | 2004 | 395 | Reissue filing fee | |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | |
| SUBTOTAL (1) | | | | | (\$) |

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims: -20** = x 18 =

Independent Claims: -3** = x 88 =

Multiple Dependent: 300 =

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description | Fee Paid |
|---------------------|-----------------|----------------|-----------------|---|-------------|
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 | |
| 1201 | 88 | 2201 | 44 | Independent claims in excess of 3 | |
| 1203 | 300 | 2203 | 150 | Multiple dependent claim, if not paid | |
| 1204 | 88 | 2204 | 44 | **Reissue independent claims over original patent | |
| 1205 | 18 | 2205 | 9 | **Reissue claims in excess of 20 and over original patent | |
| SUBTOTAL (2) | | | | | (\$) |

**or number previously paid, if greater; For Reissues, see above

3. ADDITIONAL FEES

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description | Fee Paid |
|--|-----------------|----------------|-----------------|--|-----------------------------|
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for <i>ex parte</i> reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 430 | 2252 | 215 | Extension for reply within second month | |
| 1253 | 980 | 2253 | 490 | Extension for reply within third month | |
| 1254 | 1,530 | 2254 | 765 | Extension for reply within fourth month | |
| 1255 | 2,080 | 2255 | 1,040 | Extension for reply within fifth month | |
| 1401 | 340 | 2401 | 170 | Notice of Appeal | |
| 1402 | 340 | 2402 | 170 | Filing a brief in support of an appeal | |
| 1403 | 300 | 2403 | 150 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,370 | 2453 | 685 | Petition to revive - unintentional | |
| 1501 | 1,370 | 2501 | 685 | Utility issue fee (or reissue) | |
| 1502 | 490 | 2502 | 245 | Design issue fee | |
| 1503 | 660 | 2503 | 330 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 790 | 2809 | 395 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 790 | 2810 | 395 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 | 790 | 2801 | 395 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |
| Other fee (specify) <u>Certificate of Correction</u> | | | | | 100 |
| * Reduced by Basic Filing Fee Paid | | | | | SUBTOTAL (3) (\$100) |

SUBMITTED BY

Name (Print/Type): Patricia D. Granados
Registration No. (Attorney/Agent): 33,683
Telephone: 202-912-2000
Signature: *Patricia D. Granados*
Date: November 9, 2004
Customer No.: 26633

Complete (if applicable)

24 NOV 2004